Fig . 1a

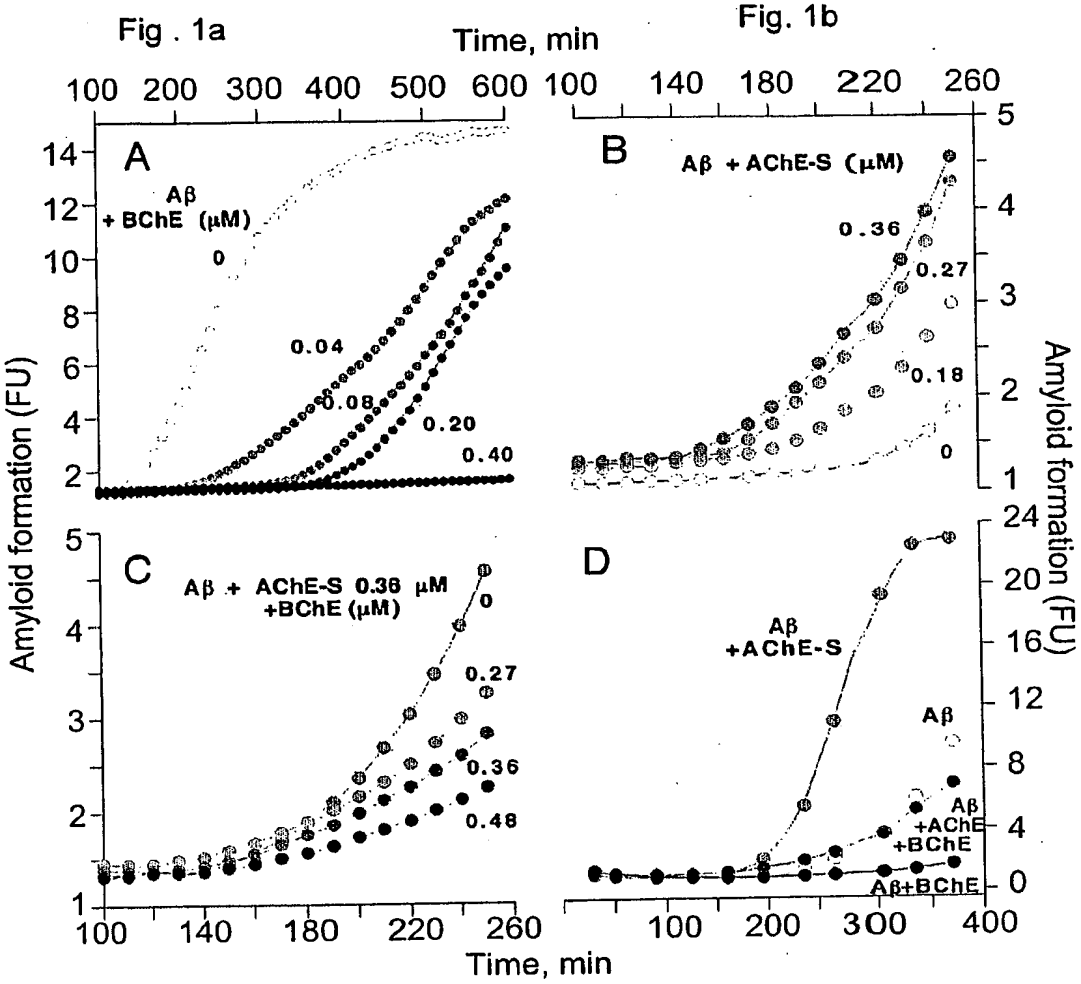

Fig. 1b

Fig. 1c

Fig. 1d

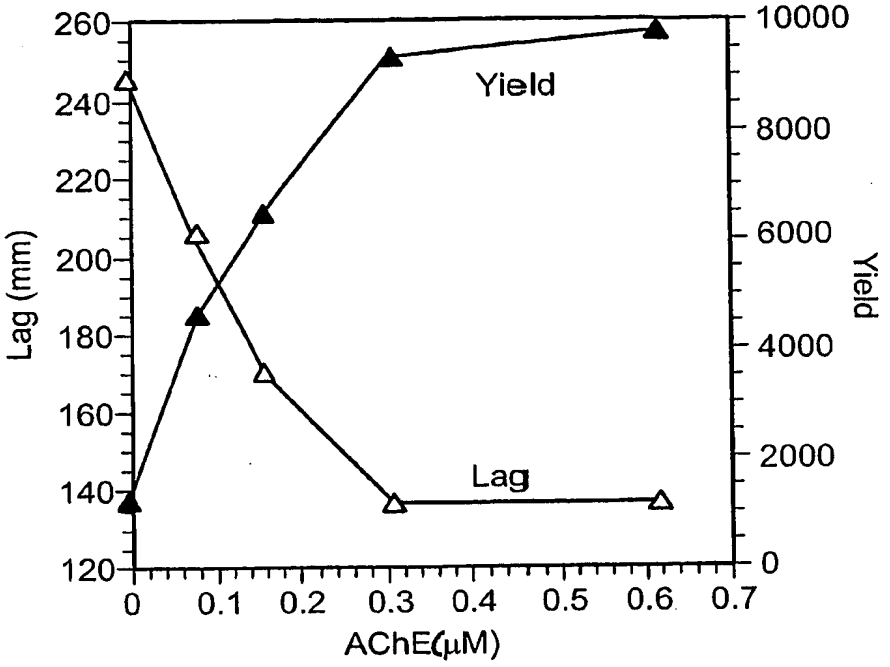
260
240
220
200
180
160
140
120
Lag (mm)
10000
8000
6000
4000
2000
0
Yield
Yield
Lag
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
AChE(μM)

Fig. 1e

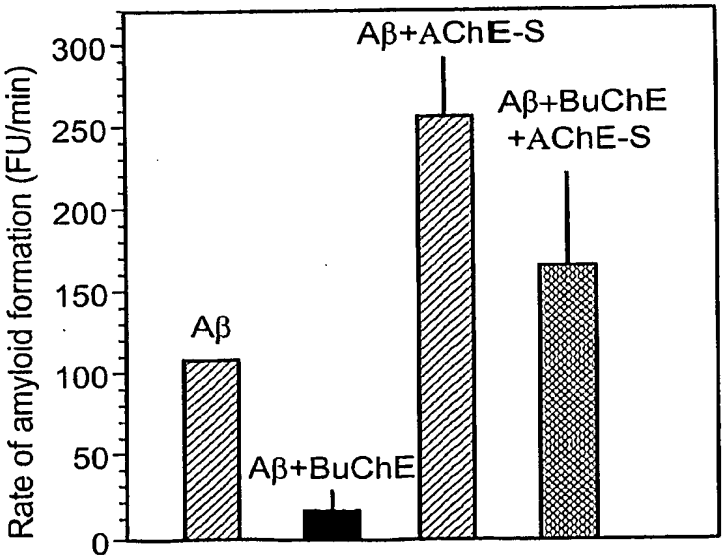
Aβ+AChE-S
Aβ+BuChE
+AChE-S
Aβ
Aβ+BuChE
300
250
200
150
100
50
0
Rate of amyloid formation (FU/min)

Fig. 2a

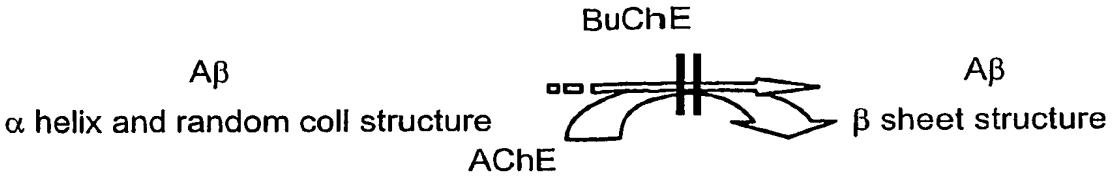

Fig. 2b

Fig. 3a

```
SEQ ID NO: 3 ASP23 ----------------------------------------SSYNVHWKNQFDHY-SKQDRCSDL
SEQ ID NO: 4 ASP40 ----------------------------DTLDEABRQWKAEFHRWSSYMVHWKNQFDHY-SKQDRCSDL
SEQ ID NO: 5 ASP63 PLEVRKGLRAQACAFWNRFLPKLLSATDTLDEABRQWKAEFHRWSSYMVHWKNQFDHY-SKQDR----
SEQ ID NO: 1 BSP41 ----------------------------GNIDEABWEWKAGFHRWNNYMMDWKNQFNDYTSKKESCVGL
                                                 ..**:.*****:.* **::
```

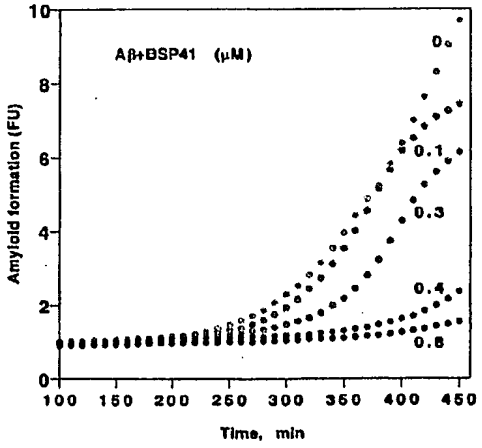

Fig. 3b

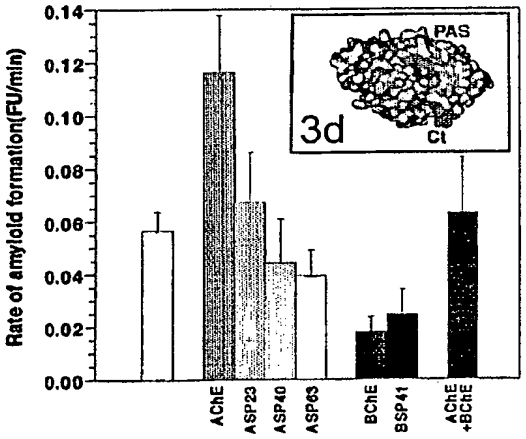

Fig. 3c

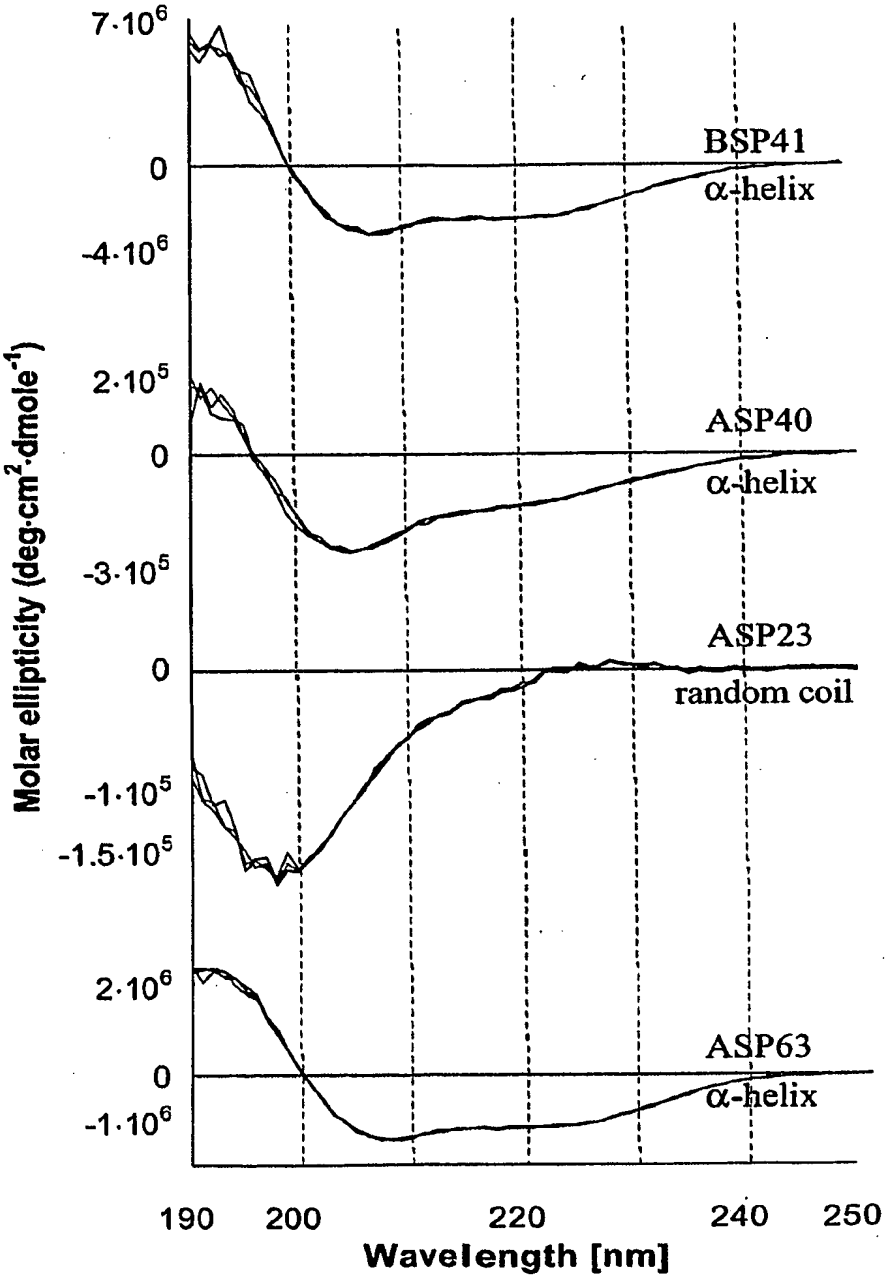
7·10^6
0
-4·10^6
BSP41
α-helix
2·10^5
0
-3·10^5
ASP40
α-helix
0
-1·10^5
-1.5·10^5
ASP23
random coil
2·10^6
0
-1·10^6
ASP63
α-helix
Molar ellipticity (deg·cm^2·dmole^-1)
190
200
220
240
250
Wavelength [nm]

Fig. 4

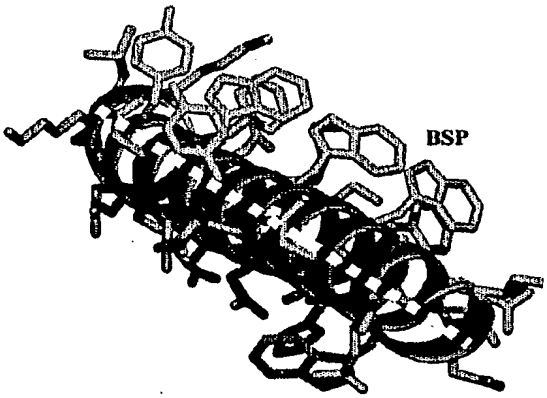

Fig. 5a

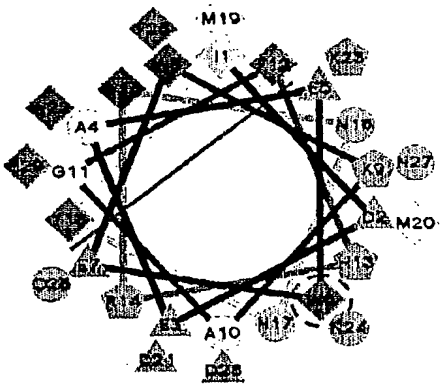

Fig. 5c

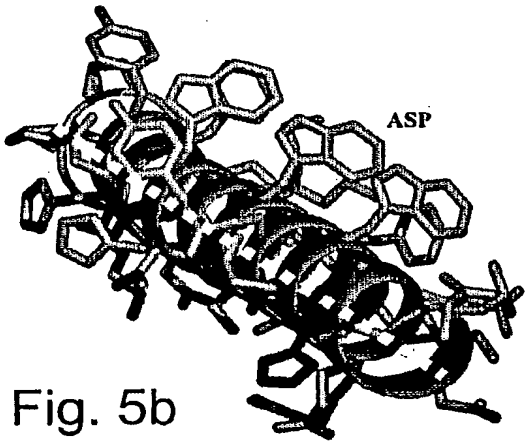

Fig. 5b

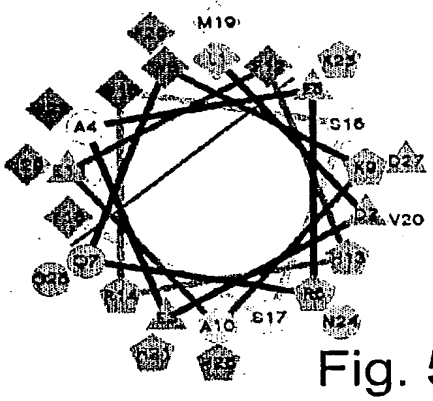

Fig. 5d

GNIDEAEWEWKAGFHRWNNYMMDWKNQFNDYTSKKESCVGL BSP (SEQ ID NO: 1)
+DEAE +WKA FHRW++YM+ WKNQF+ Y SK++ C L
DTLDEAERQWKAEFHRWSSYMVHWKNQFDHY-SKQDRCSDL ASP (SEQ ID NO: 4)

Fig. 5e

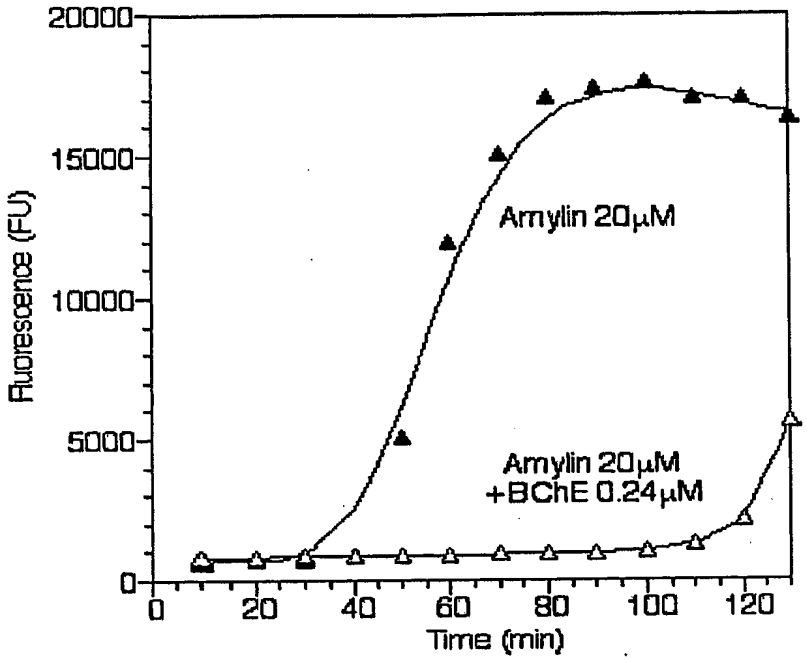
20000
15000
10000
5000
0
Fluorescence (FU)
0
20
40
60
80
100
120
Time (min)
Amylin 20μM
Amylin 20μM
+BChE 0.24μM

Fig. 6